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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,844	02/07/2005	Takashi Kanno	67222-001	4247
7590 12/16/2005				
Carlson Gaskey & Olds Suite 350 400 West Maple Road Birmingham, MI 48009			EXAMINER ESTRADA, MICHELLE	
			ART UNIT 2823	PAPER NUMBER

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/523,844

Applicant(s)

KANNO ET AL.

Examiner

Michelle Estrada

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/7/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 2/7/05 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Engdahl et al. (2001/0039168).

Re claim 1, Engdahl et al. disclose at least three rollers rotatably provided about axes arranged at parallel intervals and which rotate over a circumferential surface of a disk-shaped wafer; a rotation drive mechanism that rotates and drives at least one of the rollers; an interval adjustment mechanism capable of adjusting dimensions of the

intervals of the rollers; an interval adjustment mechanism capable of adjusting dimensions of the interval rollers; a load control device that controls a load applied from the rollers to the wafer in a radial direction of the wafer when the wafer is clamped between the rollers (See fig. 2).

Re claim 2, Engdahl et al. disclose a load cell is provided in the interval adjustment mechanism that detects the load applied to the rollers along a direction of movement of the rollers, wherein the load control device controls the interval adjustment mechanism so that the load detected by the load cell is maintained constant.

Re claim 3, Engdahl et al. disclose the rollers rotatably provided around the axes which are arranged roughly in a vertical direction, and the rollers include a flange section and a circumferential surface; wherein the flange section a diameter larger than the circumferential surface of the rollers, and the flange section provided below the circumferential surface which clamps the wafer, and the flange section has an inclined surface in which an upper surface of the flange section gradually becomes lower moving towards an outside in a radial direction.

Re claim 4, Engdahl et al. disclose wherein an angle between two of the rollers adjacent to one of the rollers and on both sides of the one of the rollers is smaller than 180°.

Re claim 5, Engdahl et al. disclose wherein pairs of rollers are arranged at three or more locations at intervals in a circumferential direction of the wafer.

Re claim 6, Engdahl et al. disclose a wafer rotating device including at least three rollers rotatably provided about axes arranged at parallel intervals and which rotate over

a circumferential surface of a disk-shaped wafer; a rotation drive mechanism that rotates and drives at least one of the rollers; an interval adjustment mechanism capable of adjusting dimensions of the intervals of the rollers; an interval adjustment mechanism capable of adjusting dimensions of the interval rollers; a load control device that controls a load applied from the rollers to the wafer in a radial direction of the wafer when the wafer is clamped between the rollers; a light source that radiates light onto the circumferential surface of a wafer supported by the wafer rotating device; and a light detector that detects light that has been radiated from the light source which is reflected on the circumferential surface of the wafer (See fig. 2).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Estrada whose telephone number is 571-272-1858. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michelle Estrada  
Patent Examiner  
Art Unit 2823

ME  
December 12, 2005